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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,325	. 04/26/2001	Mark MacDonald Wigsten	99107	8783
7	12/18/2002			
BORGWARNER INC. Patent Department 3001 West Big Beaver Road, Suite 200			EXAMINER	
			CHARLES, MARCUS	
P.O. Box 5060 Troy, MI 48007-5060			ART UNIT	PAPER NUMBER
,,			3682	
			DATE MAILED: 12/18/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/843,325	WIGSTEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Marcus Charles	3682			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 26 A	<u> April 2001</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims  4)   Claim(s) 1-23 is/are pending in the application					
	4a) Of the above claim(s) <u>20-23</u> is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-19</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Examiner	т.				
10) $\boxtimes$ The drawing(s) filed on <u>26 April 2001</u> is/are: a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on		oved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)□ All b)□ Some * c)□ None of:					
<ol> <li>Certified copies of the priority documents</li> </ol>	1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No				
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language pro- 15)☐ Acknowledgment is made of a claim for domestic	visional application has been rec	eived.			
Attachment(s)	. ,	· · - · ·			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.	5) Notice of Informal F	v (PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Detent and Trademody Office					

#### **DETAILED ACTION**

This is the first action on the merit regarding application serial number 09843325, filed 04-26-2001. Claims 1-23 are currently pending.

#### Election/Restrictions

- 1. Applicant's election of fig.1 (claims 1-19) in Paper No. 6 is acknowledged.

  Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- Claims 20-23 are withdrawn from further consideration pursuant to 37 CFR
   1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 6.

#### **Drawings**

- 3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
- 4. The plane upon which a sectional view is taken should be indicated on the view from which the section is cut by broken lines and the lines should be designated by Arabic or Roman numerals corresponding to the view number of the cross sectional view. In fig. 7, the broken line "11-11" should be --IX-IX—and in fig. 8, the line "9-9" should be --IX-IX--.

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## Specification

5. The disclosure is objected to because of the following informalities: The line representing the cross section should be labeled in Roman numeral. In page 13, line 9, "9-9" should be --IX-IX--, and in line "11-11" should be --XI-XI--.

In page 16, line 5, 14 and page 17, line 1, the reference numeral 18 is used to designate a tensioner, an actuator and a rotary actuation, respectively. Therefore, it is unclear as to the deference between these three items. It appears that the tensioner includes or comprises a hydraulic actuator of figs. 6-11.

Appropriate correction is required.

## Claim Objections

6. Claim 4-5, 9 is objected to because of the following informalities: In line 1, "portions"

should be -portion--.

In claim 5, line 3, insert --is-- after "venting".

In claim 9, line 2, insert -to-- after "chamber". In line 3, insert -to-after "arm".

Claim 10 refers to claim 11, which is not a preceding claim. It should be kept in mind that a dependent claim may refer to any preceding claim. Therefore, claim 10 should refer to any preceding claim 1-9. For the purpose of this office action, claim 10 will be treated as if it depends from claim 8. See MPEP § 608.01(n).

In claim 14,line 7, insert "the" before "rotatable body".

Appropriate correction is required.

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## Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 8, "the pressurized flow" lacks antecedent basis.

In claim 3, line 1, 'the spring force" lacks antecedent basis.

In claim 5, line 3, "the reversibility flow" lacks antecedent basis.

In claim 6, "the rotary actuator" lacks antecedent basis.

In claim 6, line 3, 'the phrase "chamber first' is confusing because it unclear which chamber is being referred to.

In claim 6, line 4-5, the phrase "... the first chambers effective to limit..." is unclear and confusing.

In claim 6, line 2, the phrase "at least one of first chamber" is unclear and confusing because it is not clear if the "the said at least one first chamber in claim 4 is the same as in the claim. The phrase should be "said at least one first chamber".

Claim 7, lines 1-2, the phrase "said at least one second chamber is rejected for the same reason as claim 6, regarding the first chamber.

In claims 7, 11, 12 and 13, line 1, the claimed is directed to a subcombination of "The rotary actuator" and claim 5 is directed to a combination of a power transmission

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and tensioner system. Therefore, it is unclear if the subcombination of the rotary actuator or the combination of the power transmission and tensioner system and the rotary actuator is being claim. For the purpose of this office action the claims are treated as though the subcombination power transmission and tensioner system is being claimed. In addition, 'the rotary actuator' lacks antecedent basis.

In claim 8, "the pressurized hydraulic fluid" lacks antecedent basis.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 8, 10-11 and 13, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by JP(60-65945). JP(60-65945) discloses rotary actuating tensioner comprising a stationery housing (10), a rotatable body (11) disposed within the housing and rotatable about a central pivot axis and in flow communication with a pressurized fluid source (20), a first chamber (30) with in the tensioner for receiving pressurized hydraulic fluid, the first chamber is disposed to move the rotatable body about the pivot point when pressurized by the hydraulic fluid and a tensioner arm (12) operatively connected to the rotatable body with a frictional contact surface (7) position to contact and tension a chain when pressurized by the hydraulic fluid.

In claim 10, note the fluid is in the chamber and is retained in the chamber to prevent the body from reverse rotation.

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In claim 11, note the valve (17) in the chamber (30)

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-4 and 6, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wunderlich et al. (624) in view of (JP(60-65945). Wunderlich et al. discloses a power transmission and tensioner system comprising a plurality of sprockets (8-10), a chain (11) wrapped around the plurality of sprockets, the chain includes three strand portions, the links of the chain in at least each of the strands are being pulled by respective sprockets. Wunderlich et al. also discloses an actuator (25) for actuating the arms (21-23) of the tensioner, a rotatable body (20), a stationary body (not labeled) and the tensioner arms are rotatable connected to the rotatable body. Wunderlich et al. does not disclose that the tensioner is a hydraulic tensioner such that the rotatable is disposed within the stationery body and a source of pressurized fluid for rotating the rotatable body. JP(60-65945) discloses the claimed invention as in paragraph 4 above. in order to increase the tensioning accuracy, sensitivity and to be able to control and adjust the tensioning operation without dismantling the tensioner. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tensioner of Wunderlich et al. to so that it is an hydraulic tensioner in view of JP(60-

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65945) in order to increase the tensioning accuracy, sensitivity and to be able to control and adjust the tensioning operation without dismantling the tensioner.

In claim 2, note the biasing spring (14) on JP(60-65945) device.

7. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP(60-65945) in view of Wunderlich et al. JP(60-65945) discloses the claimed invention as in paragraph 4 above, except for the tensioner is disposed between the slack and tight strand of the chain, a first arm opposite a second arm, each arm is connected to the roatable body by a respective pin assembly spaced apart about the pivot point. Wunderlich et al. discloses the claimed invention as in paragraph 6 above, including the tensioner (fig. 1) disposed between a slack and tight strand of a chain assembly, the tensioner comprising a plurality of arms (21-23) connected to the rotatable body by a plurality of pin assemblies, the rotatable body rotates above the pivot point to urge the arms inwardly to tension the chain in order to provide a balance of forces on each strand so as to prevent each strand from independently and inadvertently vibrating during operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tensioner of JP(60-65945) so that includes at lest two arms, and is position between the tight and slack strand in view of Wunderlich et al. in order to provide a balance of forces on each strand so as to prevent each strand from independently and inadvertently vibrating during operation.

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# Allowable Subject Matter

8. Claims 5, 7, 9, 12 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Markley et al.(470) discloses a tensioner with a pair of pivotal arms engaging the slack and tight strands (14A, 14B) of a chain. Allison('026), Taylor(107) and Bremer('276) disclose a tensioner having a pair of arms on each side of the chain. White et al.(024), GB(861741) and JP(59-208250) disclose a hydraulic tensioner for biasing at least one arm to tension a chain on at least one side. Zeilinger et al.(689) discloses a tensioner between the slack and tight side of the chain.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (703) 305-6877. The examiner can normally be reached on Monday -Thursday 7:30 am-600 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

Marcus Charles

Examiner Art Unit 3682

December 16, 2002